

Our Ref. No.: 060850.P002

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re the application of:

Michael J. Thermos

Serial No.: 08/975,284

Filed: November 20, 1997

For: NOZZLE

Examiner: Kevin Weldon

Art Unit: 1734

**REPLY BRIEF** 

Assistant Commissioner for Patents Washington, D.C. 20231

Dear Sir:

## I. NEW ISSUES RAISED BY THE EXAMINER'S ANSWER RELATED TO THE REJECTION BASED ON STATEMENTS OF INTENDED USE

Examiner has taken the position that recitations in claim 1 "for providing a nitrous oxide/fuel mixture to a combustion cylinder" and "a body member used in combination with a combustion engine" do not provide further limitation and that they are merely statements of intended use.

Specifically, Examiner has indicated that he does not consider the combustion engine to be positively recited in the claim body language "a body member used in combination with a combustion engine." In this regard, applicant respectfully submits that the limitation in the claim body is positively recited by the use of language "used in combination with." As a general rule, the grammar and intended meaning of terms used in a claim will dictate whether the language limits the claim scope. While certain terms (e.g., "for use with") may raise a question as to the

limiting effect of the language in a claim, language such as "used in combination with" generally has the effect of providing limitation. Here, the claim is explicitly limited to the combination of the combustion engine and the nozzle.

In addition, the language in the preamble further limits the claim if such is "necessary to give meaning to the claim[s] and properly define the invention." In re Fritch, 972 F.2d 1260, 1262, 23 USPQ2d 1780, 1781 (Fed. Cir. 1992). Language appearing in the preamble limits the claim where "that language is essential to particularly point out the invention defined by the claims." Loctite Corp. v. Ultraseal Ltd., 781 F.2d 861, 866, 228 USPQ 90, 92 (Fed. Cir. 1985) (term appearing in preamble is a "necessary limitation" where the term "breathes life and meaning into the claims.").

The specification of the present application makes clear that Applicant was working on the particular problem of creating an aerosol of fuel-nitrous oxide mixture to allow for an efficient combustion in a combustion chamber to run the engine, and not on general torch devices. In view of the specification, it is apparent that Applicant intended claim 1 to encompass only a nozzle that possesses certain physical characteristics necessary to be used with a combustion engine. Thus, the preamble language "a nozzle for providing a nitrous oxide/ fuel mixture to a combustion cylinder" and the language of the claim body "used in combination with a combustion engine" do give "life and meaning," and thereby provides further limitations that must be disclosed in the prior art for the claims to be anticipated.

However, even if one were to accept that such languages of claim 1 are characterized as statements of intended use, arguendo, intended use recitations and other types of functional language cannot be entirely disregarded. If the prior art structure is incapable of performing the intended use, then it does not meet the claim. The nozzle claimed in claim 1 includes a body member which is capable of being used with a combustion engine to provide a nitrous oxide/fuel mixture thereto. Whereas, the cited references, Rodrigues-Ely and Yerkins, do not disclose or suggest such body member which is capable of being attached to a combustion engine such that it can deliver a mixture of fuel and oxygen from its outlet end into

the combustion chamber. Therefore, the torch tips in Rodrigues-Ely and Yerkins are incapable of performing the intended use of the present invention.

In conclusion, the preamble language of Claim 1, "a nozzle for providing a nitrous oxide/fuel mixture to a combustion cylinder" and the language of the claim body "used in combination with a combustion engine" do give "life and meaning," and thereby provide further limitations that must be disclosed in the prior art for Claim 1 to be anticipated.

## II. NEW ISSUES RAISED BY THE EXAMINER'S ANSWER RELATED TO THE REJECTION BASED ON INHERENCY

"To anticipate a claim, a prior art reference must disclose every limitation of the claimed invention, either explicitly or inherently." In re Schreiber, 128 F.3d 1473, 1477, 44 USPQ2d 1429, 1431 (Fed. Cir. 1997). Examiner has indicated that "although the nozzles in both Rodrigues-Ely and Yerkins do not expressly disclose all of these functional limitations the passages in Rodrigues-Ely and Yerkins are inherently capable of supplying nitrous/oxide and liquid fuel therethrough."

To establish inherency, the extrinsic evidence "must make clear that the missing descriptive matter is necessarily present in the thing described in the reference, and that it would be so recognized by persons of ordinary skill."

Continental Can Co. v. Monsanto Co., 948 F.2d 1264, 1268, 20 U.S.P.Q.2d 1746, 1749 (Fed. Cir. 1991). "Inherency, however, may not be established by probabilities or possibilities. The mere fact that a certain thing may result from a given set of circumstances is not sufficient." Id. At 1269.

In finding anticipation by inherency, Examiner has indicated that "if nitrous oxide and liquid fuel are supplied to the first and second channels in Rodrigues-Ely and Yerkins nitrous oxide emerging from the second tube outlet would expand radially as it exited the outlet end of the tube atomizing the surrounding concentric fuel streams." In doing so, Examiner has made no attempt to show that the torch tips of Rodrigues-Ely and Yerkins used to perforate and cut metals are suitable for

attachment to a combustion engine and injecting a mixture of nitrous oxide and fuel into a combustion chamber in a form that allow for an efficient combustion in an internal combustion engine.

As mentioned above, inherency may not be established by probability or possibilities. However, the examiner's inherency analysis rests only upon unsupported conjecture that does not rise even to the level of probability or possibility that the torch tips described in Rodrigues-Ely and Yerkins are capable of delivering a suitable aerosol of fuel-nitrous oxide mixture to allow for an efficient combustion in a combustion engine. Therefore, Examiner's theory that torch tips in Rodrigues-Ely and Yerkins are capable of performing the same functions as a nozzle for providing a nitrous oxide/fuel mixture to a combustion cylinder in claim 1 is insufficient to show that the claimed device is <u>inherent</u> in Rodrigues-Ely and Yerkins.

In this connection it is noted that the torch tips provide no facility for attachment and sealing with a combustion cylinder, absent such sealing one of ordinary skill in the art would clearly recognize that the engine would not function. Thus the examiner's disfunctional creation cannot anticipate applicant's claimed invention through inherency or otherwise.

In conclusion, it is respectfully submitted that anticipation by inherency cannot be established since torch tips in Rodrigues-Ely and Yerkins are incapable of performing the claimed functionality including: providing a nitrous oxide/fuel mixture to a combustion cylinder as claimed in Claim 1.

## IV. CONCLUSION

Based on the foregoing, Applicants request that the Board overturn the rejection of all pending claims and hold that all of the claims of the present application are allowable.

Respectfully submitted,

BLAKELY, SOKOLOFF, TAYLOR & ZAFMAN

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Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number. 3000 08/975,284 **Application Number** THE THATE November 20, 1997 Filing Date **RANSMITTAL FORM** MICHAEL J. THERMOS First Named Inventor (to be used for all correspondence after initial filing) **Group Art Unit** 1734 **Examiner Name** WELDON, K. 060850.P002 Total Number of Pages in This Submission 9 Attorney Docket Number **ENCLOSURES** (check all that apply) After Allowance Communication Assignment Papers (for an Application) M Fee Transmittal Form to Group Appeal Communication to Board of Appeals and Interferences Fee Attached Drawing(s) Appeal Communication to Group Amendment / Response Licensing-related Papers (Appeal Notice, Brief, Reply Brief) After Final Petition Routing Slip (PTO/SB/69) and Accompanying Petition **Proprietary Information Extension of Time Request** To Convert a Provisional Application Status Letter **Express Abandonment Request** Additional Enclosure(s) Power of Attorney, Revocation Change of Correspondence Address (please identify below): Information Disclosure Statement Terminal Disclaimer **REPLY BRIEF (5)** Certified Copy of Priority POST CARD (1) Document(s) Small Entity Statement Response to Missing Parts/ Incomplete Application Request for Refund Response to Missing Remarks Parts under 37 CFR 1.52 or 1.53 SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT Thomas M. Coester, Reg. No. 39,637 Firm BLAKELY, SOKOLOFF, TAYLOR & ZAFMAN Individual name Signature ~ Monus May 9, 2000 Date

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| Filing Date            | 11/20/97           |  |
| First Named Inventor   | MICHAEL J. THERMOS |  |
| Examiner Name          | WELDON, K.         |  |
| Group Art Unit         | 1734               |  |
| Attorney Docket Number | 060850.P002        |  |

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| Number  | 105 130 205 65 Surcharge - late filing fee or cath  |  |  |  |  |  |  |  |
| Deposit Account Blakely, Sokoloff, Taylor & Zafman LLP  | 127 50 227 25 Surcharge - late provisional filing fee or cover sheet.   |  |  |  |  |  |  |  |
| Name  | 139 130 139 130 Non-English specification   |  |  |  |  |  |  |  |
| Charge Any Additional Fee Required Under 37 CFR 1.16 and 1.17 CFR 1.16 and 1.17 CFR 1.76 and 1.17     | 147 2,520 147 2,520 For filing a request for reexamination  |  |  |  |  |  |  |  |
| 1.311(b)  | 112 920° 112 920° Requesting publication of SIR prior to Examiner action  |  |  |  |  |  |  |  |
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| 1. FILING FEE   | 117 870 217 435 Extension for response within third month   |  |  |  |  |  |  |  |
| Large Entity Small Entity  Fee Fee Fee Fee Fee Description Fee Paid                                   | 118 1,360 218 680 Extension for response within fourth month  |  |  |  |  |  |  |  |
| Code (\$) Code (\$)   | 128 1,850 228 925 Extension for response within fifth month   |  |  |  |  |  |  |  |
| 101 690 201 345 Utility filing fee  | 119 300 219 150 Notice of Appeal<br>120 300 220 150 Filing a brief in support of an appeal                            |  |  |  |  |  |  |  |
| 106 310 206 155 Design filing fee   | 120 300 220 150 Filing a brief in support of an appeal 121 260 221 130 Request for oral hearing                       |  |  |  |  |  |  |  |
| 107 480 207 240 Plant filing fee  | 138 1,360 138 1,360 Petition to institute a public use proceeding   |  |  |  |  |  |  |  |
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| 2. EXTRA CLAIM FEES Fee from  | 144 580 244 290 Plant issue fee   |  |  |  |  |  |  |  |
| Extra Claims below Fee Paid   | 122 130 122 130 Petitions to the Commissioner   |  |  |  |  |  |  |  |
| Independent - " = - C C   | 123 50 123 50 Petitions related to provisional applications   |  |  |  |  |  |  |  |
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| Multiple Dependent Claims =  **or number previously paid, if greater, For Reissues, see below         | 581 40 581 40 Recording each patent assignment per  |  |  |  |  |  |  |  |
| Large Entity Small Entity   | property (times number of properties)   |  |  |  |  |  |  |  |
| Fee Fee Fee Fee Description   | 146 760 246 380 Filing a submission after final rejection (37 CFR 1.129(a))   |  |  |  |  |  |  |  |
| Code (\$) Code (\$)   | (37 CFR 1.125(a)) 149 760 249 380 For each additional invention to be   |  |  |  |  |  |  |  |
| 103 18 203 9 Claims in excess of 20   | examined (37 CFR 1.129(b))  |  |  |  |  |  |  |  |
| 102 78 202 39 Independent claims in excess of 3   | Other fee (specify)   |  |  |  |  |  |  |  |
| 104 270 204 135 Multiple Dependent claim  | Other fee (specify)   |  |  |  |  |  |  |  |
| 109 78 209 39 "Reissue independent claims over original patent  |   |  |  |  |  |  |  |  |
| 110 18 210 9 "Reissue claims in excess of 20 and over original patent                                 |   |  |  |  |  |  |  |  |
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|--------------------------|------------------------------------|------|--------------------------|----------------------------|---------|
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| Signature                | Thomas Coeste                      | Date | 05-09-00                 | Deposit Account<br>User ID | 02-2666 |